

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A flexible wiring substrate comprising
an insulating substrate,
a wiring pattern formed on a surface of the insulating substrate, and
a solder resist layer formed on covering a surface of the wiring pattern,
wherein the solder resist layer is formed on a part of the surface of the wiring pattern to
leave-excluding at least terminal portions of the wiring pattern uncovered by the solder resist
layer,
wherein the uncovered terminal portions of the wiring pattern have
at least a portion of the outermost surface of the wiring pattern which is not covered with
the solder resist layer being provided with a tin-bismuth alloy plating layer which is formed on
the surface of the wiring pattern, and
characterized in that wherein the wiring pattern is a multilayer comprises-comprising a
base layer formed of a conductor and that a first tin plating layer, is provided on the base layer so
as to extend under a region covered with the solder resist layer and also under a region not
covered with the solder resist layer.

2. (currently amended): A flexible wiring substrate according to claim 1, which further
comprises wherein the first tin plating layer of the wiring pattern present under a region not
covered with the solder resist layer is provided with a second tin plating layer disposed between

the first tin plating layer and the tin-bismuth alloy plating layer, and the second tin plating layer is formed adjacent to the solder resist layer, on the same surface of the wiring pattern as the surface where the solder resist layer is formed,~~and at least a portion of the area of the second plating layer is provided with the tin-bismuth alloy plating layer.~~

3. (original): A flexible wiring substrate according to claim 1, wherein the first tin plating layer has a thickness of 0.001 μm to 0.6 μm .

4. (original): A flexible wiring substrate according to claim 2, wherein the first tin plating layer has a thickness of 0.001 μm to 0.6 μm .

5. (original): A flexible wiring substrate according to claim 1, wherein the first tin plating layer has a thickness of 0.001 μm to 0.2 μm .

6. (original): A flexible wiring substrate according to claim 2, wherein the first tin plating layer has a thickness of 0.001 μm to 0.2 μm .

7. (original): A flexible wiring substrate according to claims 5 or 6, wherein the first tin plating layer is not subjected to heat treatment before provision of the solder resist layer.

8. (currently amended): A flexible wiring substrate according to any of claims 1 to 6, wherein the wiring pattern further comprises a patterned copper layer and the first tin plating layer formed on the copper layer.

9. (currently amended): A flexible wiring substrate according to claim 7, wherein the wiring pattern further comprises a patterned copper layer and the first tin plating formed on the copper layer.

10. (currently amended): A method for producing a flexible wiring substrate including an insulating substrate, a wiring pattern formed on a surface of the insulating substrate, and a solder resist layer formed on a surface of the wiring pattern, wherein the solder resist layer is formed on a part of the surface of the wiring pattern to leave at least terminal portions of the wiring pattern uncovered by the solder resist layer, wherein the uncovered terminal portions of the wiring pattern have a tin-bismuth alloy plating layer which is formed on the surface of the wiring pattern, and wherein the wiring pattern is a multilayer comprising a base layer formed of a conductor and a first tin plating layer~~a solder resist layer covering a surface of the wiring pattern excluding at least terminal portions of the wiring pattern, at least a portion of the outermost surface of the wiring pattern which is not covered with the solder resist layer being provided with a tin-bismuth alloy plating layer,~~ characterized in that the method comprises

a step of forming a base layer of the wiring pattern through patterning of a conductor layer;

a step of forming a first tin plating layer on the base layer;

a step of forming a solder resist layer so as to cover a first region of the first tin plating layer such that a second region ~~portion~~ of the first tin plating layer is left uncovered~~exposed~~;

a step of forming a second tin plating layer on a the second region of the first tin plating layer, ~~which region is not covered with the solder resist layer;~~ and

a step of providing a tin-bismuth alloy plating layer on at least a portion of the region of the second tin plating layer.

11. (original): A method for producing a flexible wiring substrate according to claim 10, wherein the first tin plating layer is formed so as to have a thickness of 0.001 μm to 0.6 μm .

12. (original): A method for producing a flexible wiring substrate according to claim 10, wherein there are performed a step of forming the first tin plating layer so as to have a thickness of 0.001 μm to 0.2 μm and, subsequently, a step of forming the solder resist layer without performing heat treatment.